Spring Flood Outlook

February 23, 2023
9:00 AM

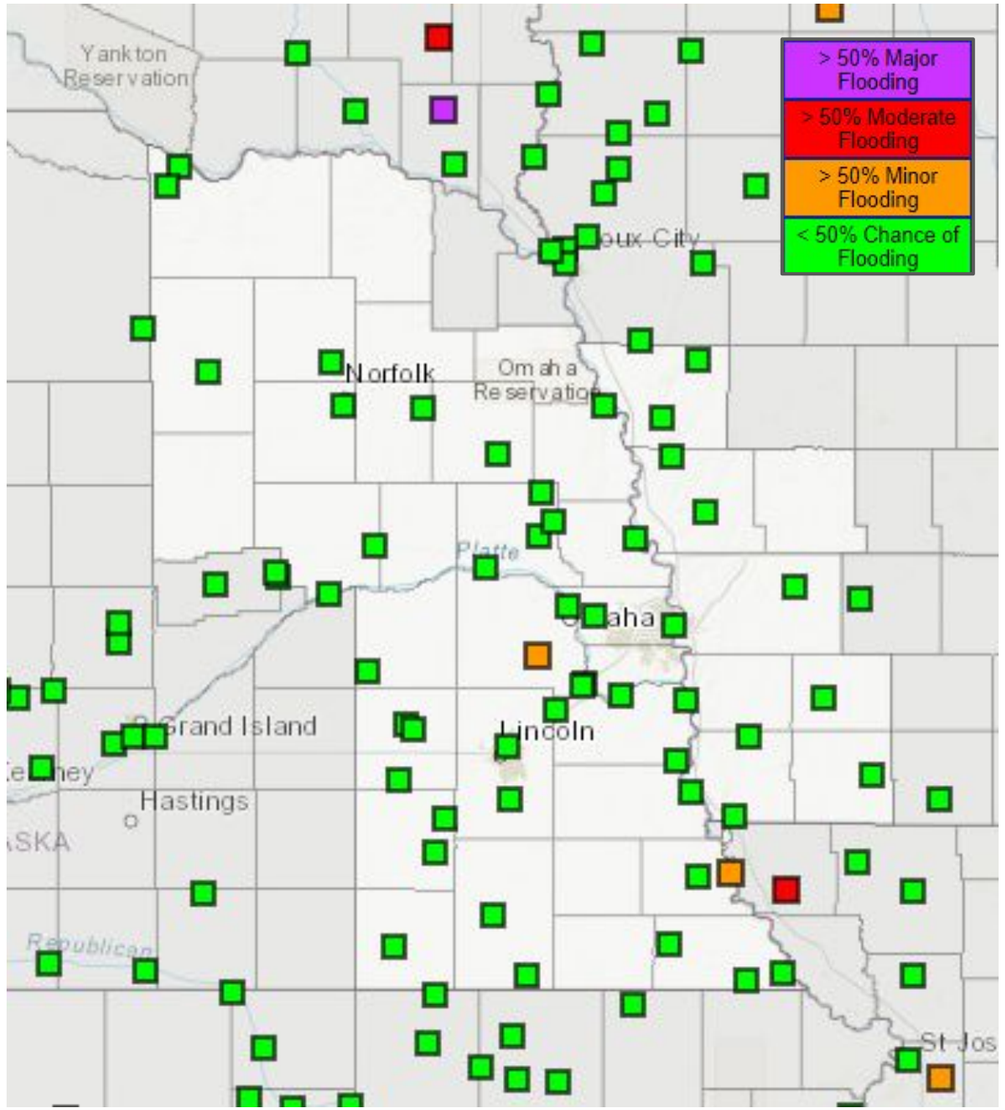
Updated February 23rd, 2023

Key Messages

- ➔ The overall spring flood threat is **Below-Normal**
- ➔ There is a near-to-above normal threat for flooding along the Missouri River (below the Platte River) once the Plains snowpack melts.
- ➔ For ice jam information, please visit www.weather.gov/oax/icejamrisk

Important Information

- ➔ This is the first issuance, the next update planned on March 9th.



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Flood Risk Contribution Factor	Contribution to Flood Risk
Snowpack (North and South Dakota)	Significant
Snowpack (Nebraska and Iowa)	Low
Snowpack (Missouri River headwaters)	Low
Snowpack (Platte River headwaters)	Elevated
Soil Moisture	Below Normal
Frost Depth	Low
River Ice Thickness	Low
Precipitation Outlook	Low

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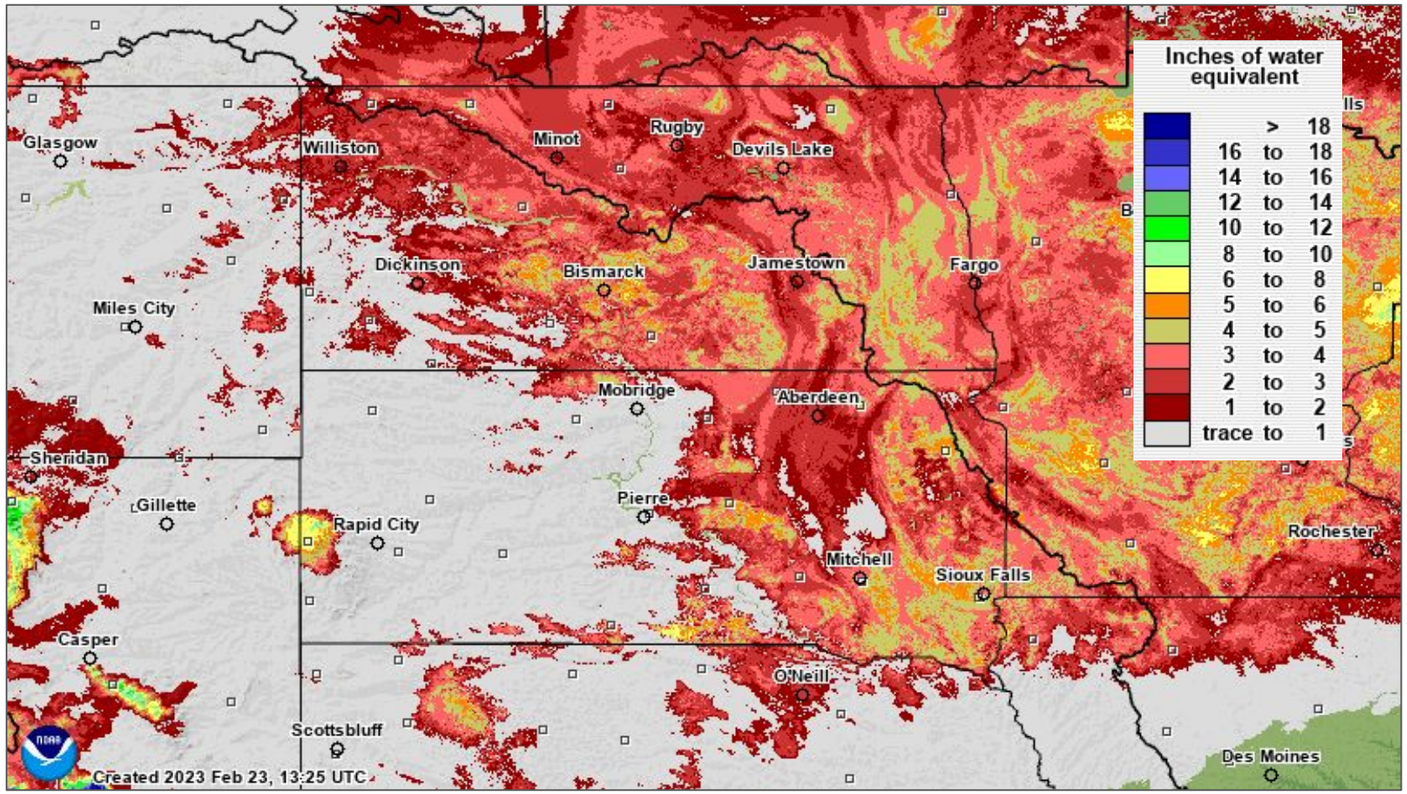
River Basin	Flood Risk
Niobrara River	Below-Normal
Missouri River (below Sioux City to Platte River)	Below-Normal
Missouri River (below Platte River)	Near-to-Above Normal
Platte River	Below-Normal
Elkhorn River	Below-Normal
Big Blue River	Below-Normal
Salt Creek	Below-Normal
Wahoo Creek	Below-Normal
Nishnabotna River	Below-Normal

Plains Snowpack

February 23, 2023
9:00 AM

Key Messages

- A series of winter storms has led to a robust Plains snowpack.
- The deepest snowpack exists over portions of:
  - Central and eastern North Dakota
  - Eastern South Dakota
  - Far northwest Iowa
  - Far southwest Minnesota

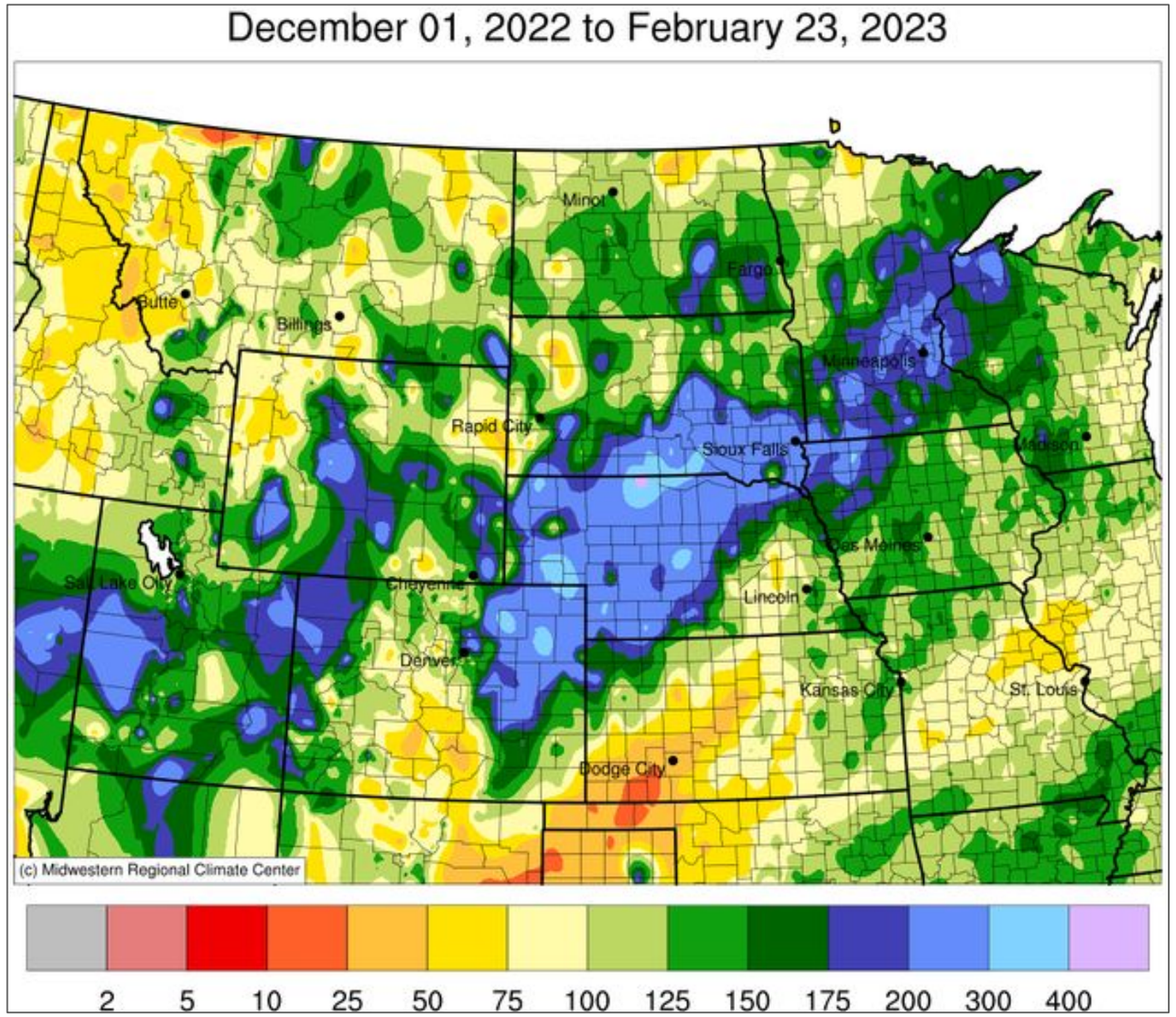


Winter Precipitation

February 23, 2023
9:00 AM

Key Messages

- ➔ Precipitation this winter has been focused over western and central Nebraska, as well as southern South Dakota.
- ➔ Much of eastern Nebraska and southwest Iowa has been near to below normal.
- ➔ This lack of winter precipitation not only acts to add to the ongoing precipitation deficit, but also acts to lessen the widespread flooding threat.



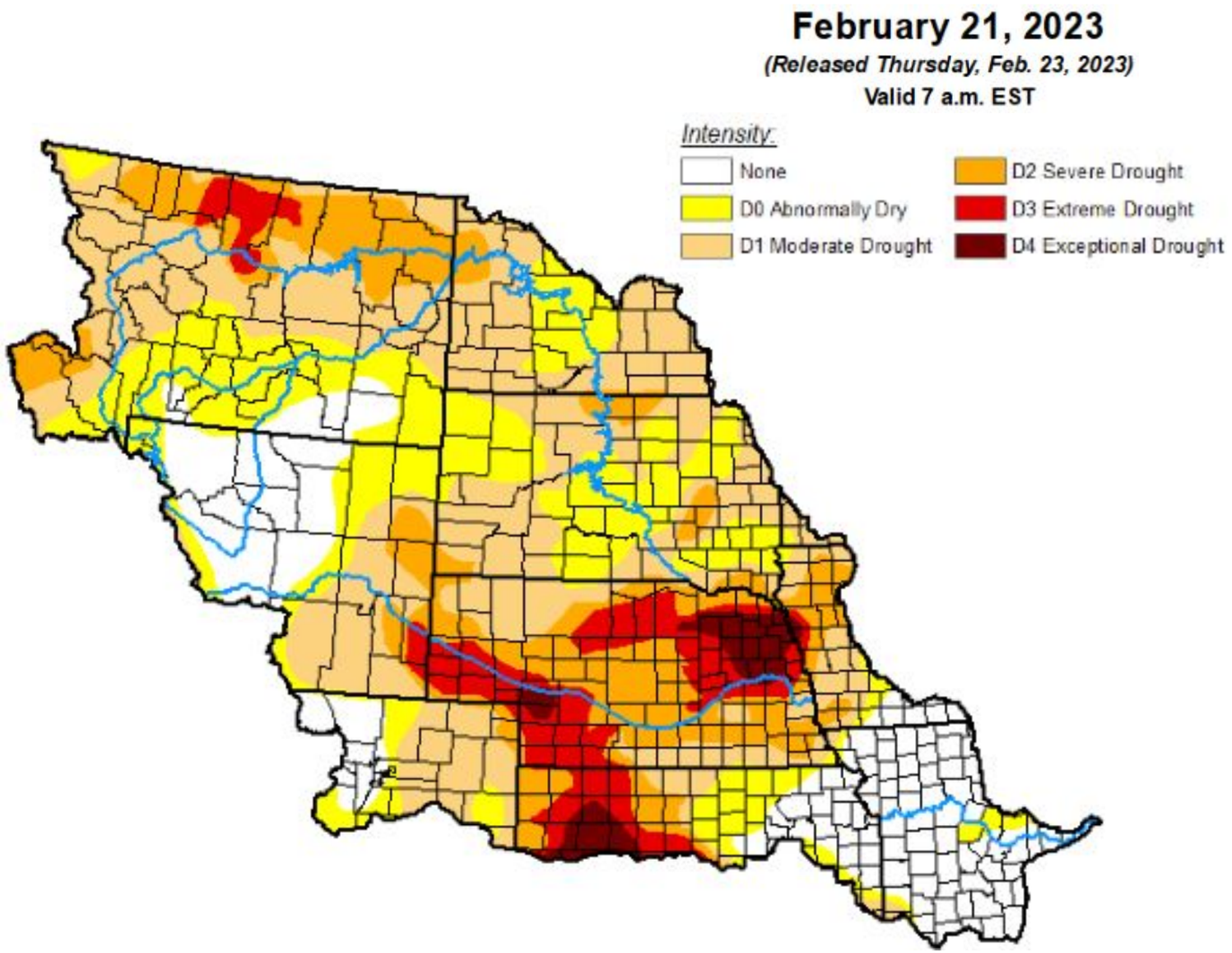
Source: Midwest Regional Climate Center

Drought Status

February 23, 2023
9:00 AM

Key Messages

- ➔ A large portion of the Missouri River basin is in drought status.
- ➔ The worst drought conditions are in Nebraska and western Kansas.
- ➔ Drought conditions are expected to persist through the spring.

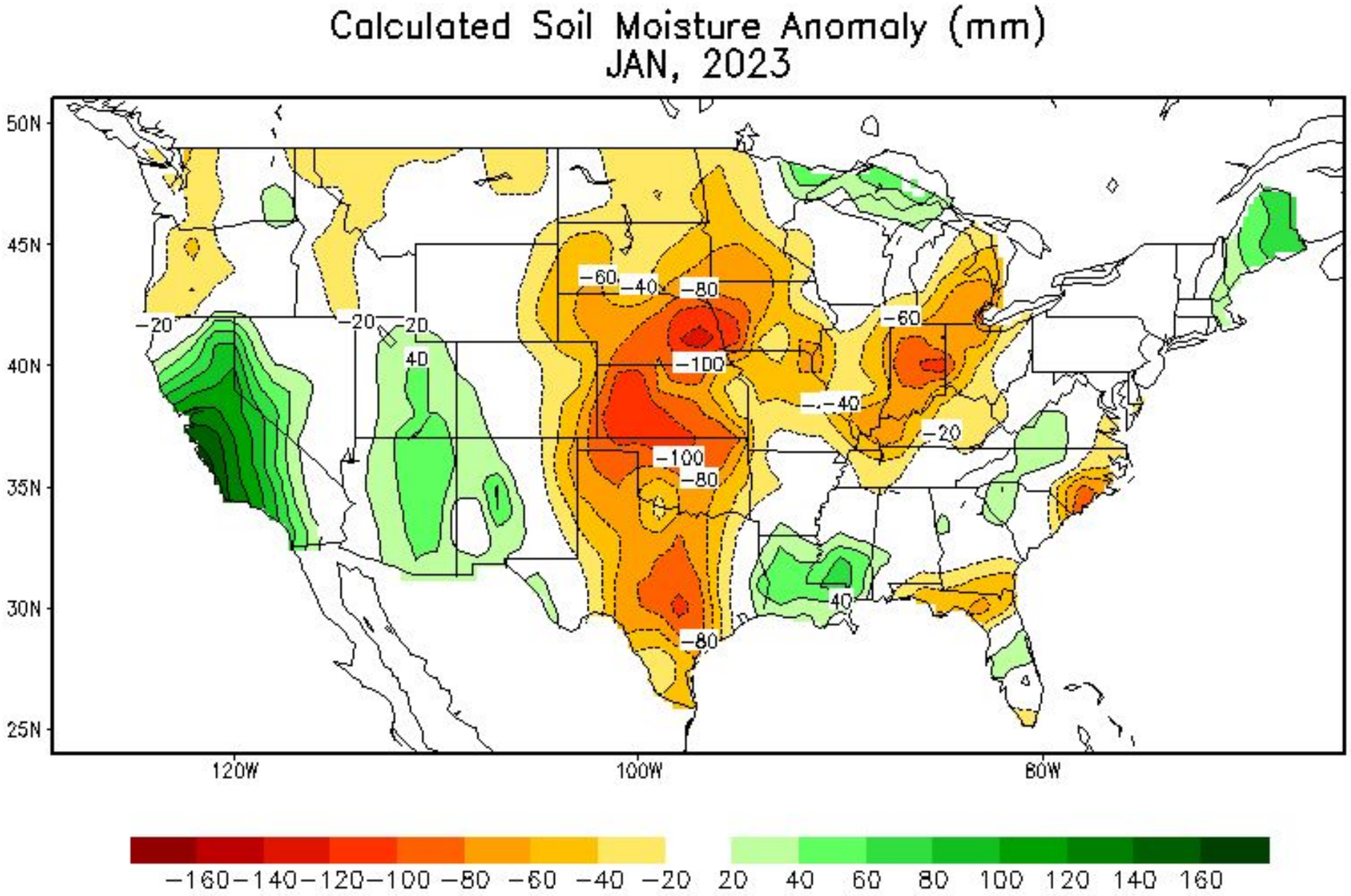


Soil Moisture

February 23, 2023
9:00 AM

Key Messages

- Soil moisture across the region is generally well below normal.
- Across the Missouri River basin, no soil moisture surplus exists.
- The driest areas are in eastern Nebraska and western Kansas.

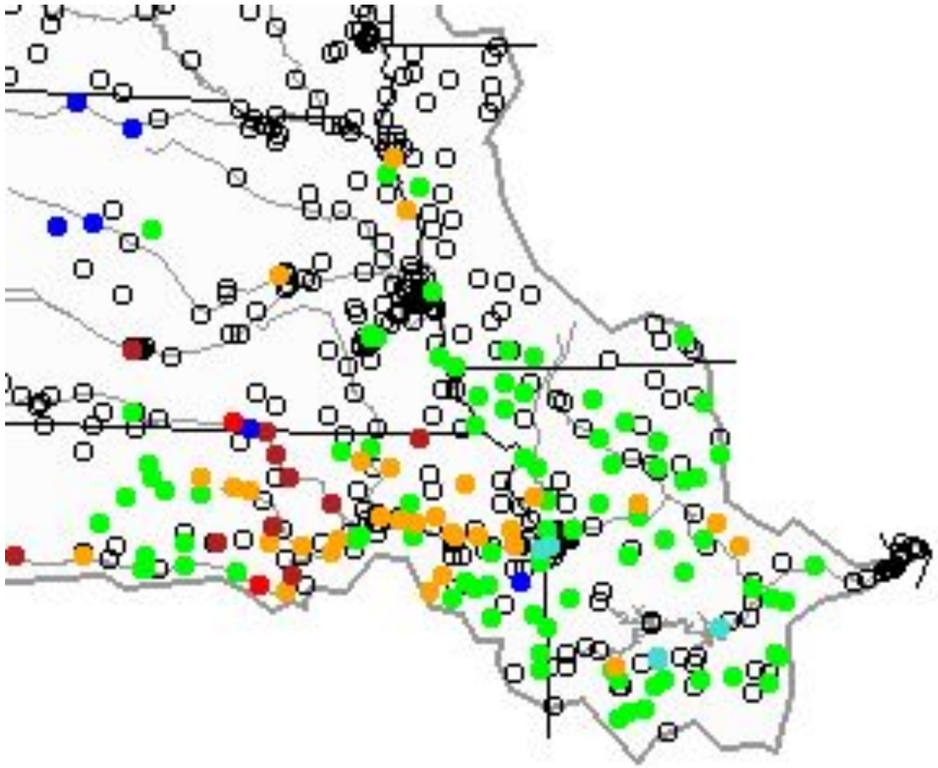


Current Streamflow

February 23, 2023
9:00 AM

Key Messages

- ➔ Most rivers are currently near normal.
- ➔ Many rivers across Nebraska and Iowa are ice covered or are being affected by ice. As a result river streamflow measurements are sparse but should become more common in the coming days.
- ➔ Most rivers have lost their ice, though some ice remains primarily along shorelines and sandbars.



Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

Precipitation Outlook

February 23, 2023
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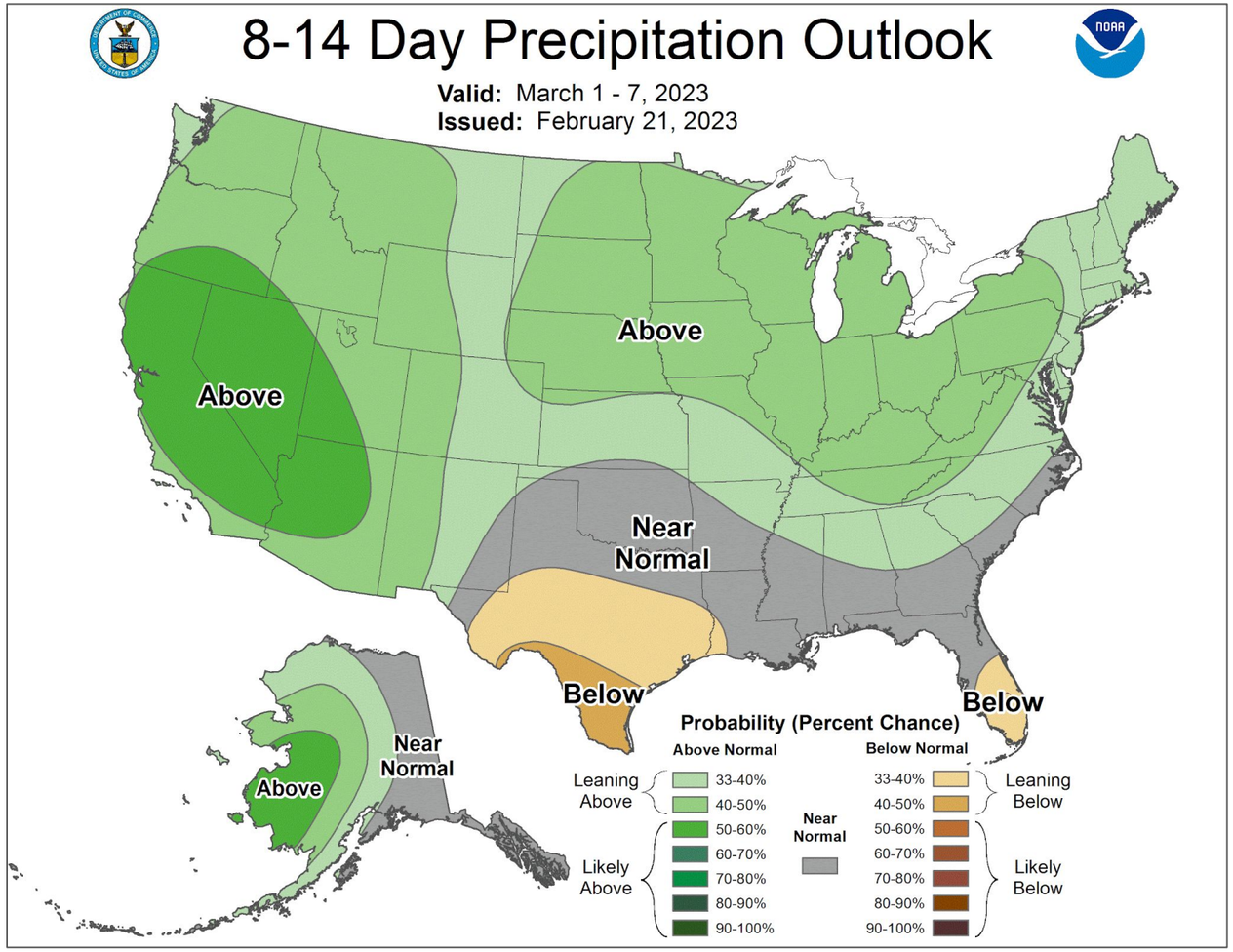
Key Messages

➔ Through mid-February, above-normal precipitation is favored for the Missouri River basin.

➔ Beyond that time frame, into March, the latest information does not favor above or below-normal precipitation.



Mountain Snowpack (Missouri River)

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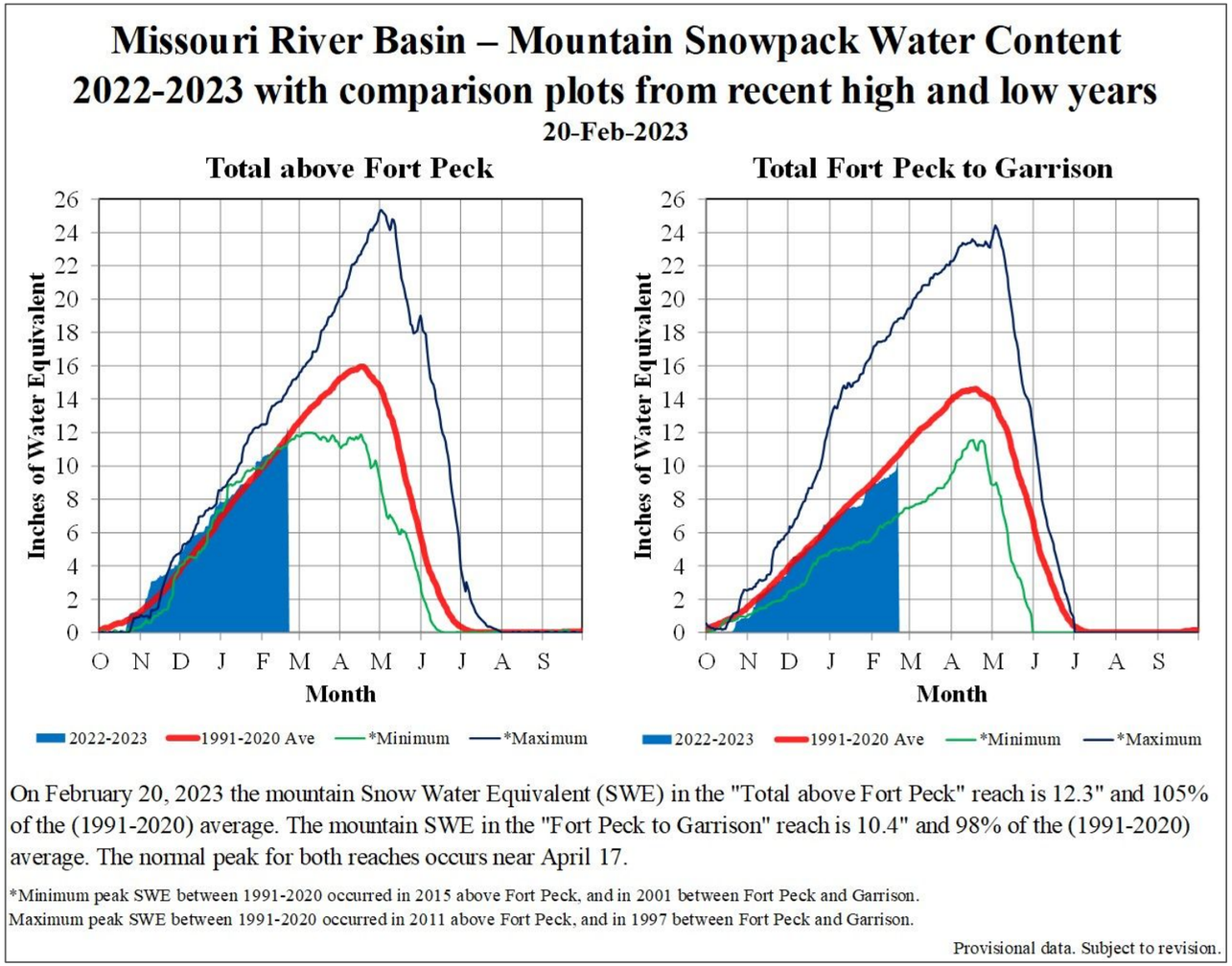
9:00 AM

Key Messages

➔ For this time of year the snowpack in the Missouri River headwaters is average.

➔ The normal peak snowpack date is typically around April 15th.



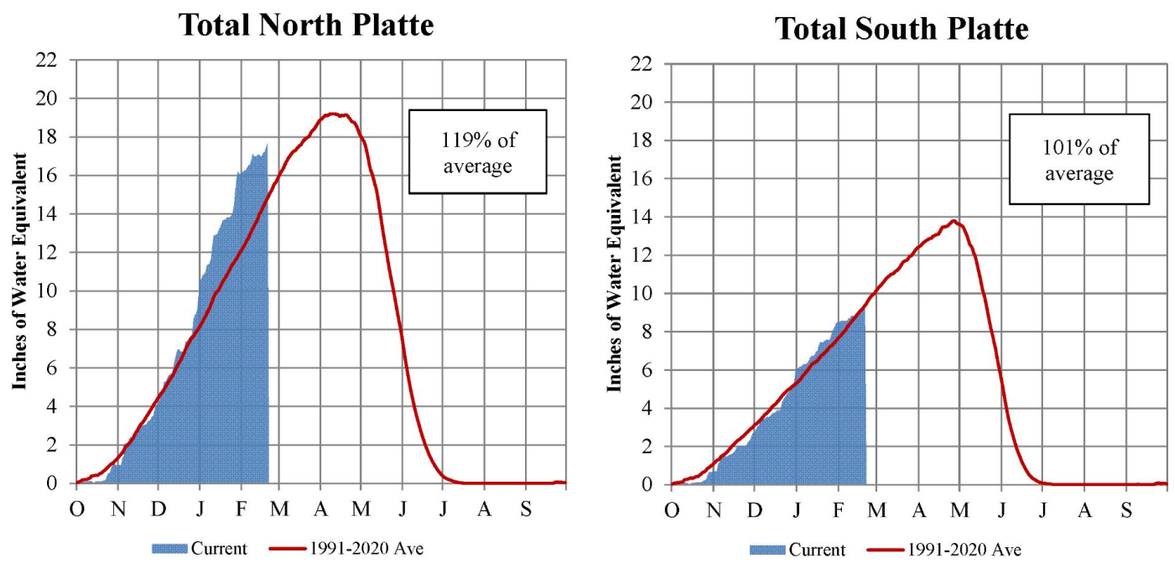
Mountain Snowpack (Platte River)

February 23, 2023
9:00 AM

Key Messages

- ➔ Snow conditions in the Platte River headwaters are near-to-above average.
- ➔ Specifically, the North Platte river basin is above-average, while the South Platte river basin in near average.
- ➔ In a typical winter, snow accumulates in the Platte River headwaters through mid to late April.

Platte River Basin - Mountain Snowpack Water Content
Water Year 2022-2023
February 21, 2023



The North and South Platte River Basin mountain snowpacks normally peak near April 10 and the end of April, respectively. As of February 21, 2023, the mountain snowpack SWE in the "Total North Platte" reach is 17.7", 119% of the (1991-2020) average. The mountain snowpack SWE in the "Total South Platte" reach is 9.4", 101% of the (1991-2020) average.

Source: USDA, Natural Resource Conservation Service

Provisional Data. Subject to Revision